

## CLAIMS

I claim:

1. A nail gun comprising:

a body provided with an upright slot and a horizontal slot perpendicular to and in communication with said upright slot;

an explosive array formed of a series of explosive cavities and retaining slots, said explosive array being movably located in said upright slot of said body;

a nail magazine fastened to one end of said body; and

a trigger mechanism located in said horizontal slot of said body and connected with said nail magazine, said trigger mechanism serving to discharge nails kept in said nail magazine by the force of said explosive array;

wherein said trigger mechanism comprises:

a nail firing tube connected at one end with said nail magazine and provided at other end with a contact surface whereby said nail firing tube is movably located in said horizontal slot of said body;

a link rod provided with a contact portion which comes in contact with said contact surface of said nail firing tube;

an actuation rod pivoted at one end in said horizontal slot and provided at other end with a retaining hook engageable with one of said retaining slots of said explosive array, said actuation rod further provided with a guide hole for receiving one end of a pin whereby said pin is extended from said link rod; and

a recovery spring fastened at one end with a fixation point of said body, and at other end with one end of said link rod;

said contact portion of said link rod being pushed by said contact surface of said nail firing tube at the time when the one end of said nail firing tube is pressed against an object or wall, so as to cause said nail firing tube to displace, thereby resulting in the stretching of said recovery spring and the moving of the one end of said pin of said link rod from a front end of said guide hole to a rear end of said guide hole so as to cause said actuation rod to swivel on the one end thereof such that said retaining hook of the other end of said actuation rod is retained in one of the series of said retaining slots of said explosive array whereby said link rod is caused by a recovery force of said recovery spring to return to an original position thereof at the time when the one end of said nail firing tube is moved away from the object or wall, thereby resulting in the moving of the one end of said pin from the rear end of said guide hole to the front end of said guide hole so as to cause said retaining hook of the other end of said actuation rod to move in an upward direction to bring about an upward movement of said explosive array along said upright slot of said body.